# THOMAS GAINSBOROUGH SCHOOL
# HEAD LANE, GREAT CORNARD, SUFFOLK

## DETAILED MAGNETOMETER SURVEY

Report Number: 1054

April 2014

# THOMAS GAINSBOROUGH SCHOOL, HEAD LANE
# GREAT CORNARD, SUFFOLK

## DETAILED MAGNETOMETER SURVEY

Prepared for:
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April 2014

| | | | |
|---|---|---|---|
| **Site Code** | COG 039 | **NGR** | TL 889 398 |
| **Planning Ref.** | B/14/00227/FUL | **OASIS** | britanni1-177137 |
| **Approved By** | Martin Brook | **DATE** | April 2014 |

 

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***ABSTRACT***

*Detailed fluxgate gradiometer survey was undertaken by Britannia Archaeology Ltd over one playing field (c.2.4 hectares) on the 17$^{th}$ April 2014. Despite the sites high potential for encountering remains of a prehistoric origin, only a relatively narrow range of anomalies were recorded, of which only a few have a potential archaeological derivation. A degree of site levelling and terracing is believed to have been undertaken in the 1970's that may have damaged and could also be masking anomalies of potential archaeological origin.*

*Isolated dipolar responses were most numerous and probably relate to the introduction of modern ferrous cultural debris into the topsoil. Eleven areas of magnetic disturbance were recorded, some of which were caused by ferrous fences on the periphery and a Tarmacadam path. A further six smaller areas of magnetic disturbance are likely to be modern, however an archaeological origin cannot be ruled out.*

*A linear area of magnetic disturbance demarcates the location of a recently removed all weather cricket wicket, surrounded by ten isolated dipolar anomalies likely to be ferrous posts employed to fence off the cricket square. Four very strong isolated dipolar responses relate to a pair of extant goalposts located on the football pitch.*

*One very strong dipolar linear trend delineates the location of a ferrous and/or electric underground service run.*

*Three small positive discrete anomalies recorded through the centre of the north-eastern half of the dataset are indicative of archaeological rubbish pits, however a modern or geological derivation cannot be ruled out.*

*One positive curvilinear anomaly indicative of a ring ditch was recorded close to the northern boundary and may be of archaeological derivation, however the reading is fairly strong and a modern origin cannot be ruled out.*

*It would be prudent to ground-test anomalies interpreted as having archaeological potential, in combination with a proportion of the areas of magnetic disturbance.*

## 1.0 INTRODUCTION

On Thursday the 17th April 2014 Britannia Archaeology Ltd (BA) undertook detailed fluxgate gradiometer survey over 2.4 hectares on one playing field in advance of the construction of new school buildings and associated groundworks (Figure 1) at Thomas Gainsborough School, Head Lane, Great Cornard, Suffolk, (NGR TL 889 398).

The survey was commissioned by Mark Hinman of Pre-Construct Archaeology Ltd in response to a design brief issued by Suffolk County Council Archaeological Service/Conservation Team (SCCAS/CT), (Brudenell. M, dated 28/03/2014).

## 2.0 SITE DESCRIPTION

The site is located to the south-east of the main buildings at Thomas Gainsborough School, it is currently used as a football pitch and playing field bisected by a Tarmacadam path (Figure 2). It is present at a height of *c.*25m AOD and slopes from the north-east down to the south-west.

Bedrock geology is described as Lewes Nodular Chalk, Seaford Chalk, Newhaven Chalk and Culver Chalk Formation, a sedimentary bedrock formed approximately 71 to 94 million years ago in the Cretaceous Period when the local environment was dominated by warm chalk seas depositing microscopic plankton remains (BGS 2014).

Superficial geology is described as river terrace deposits of sand and gravel formed up to 3 million years ago in the Quaternary Period when the local environment was dominated by rivers, depositing sand and gravel detrital material in channels forming terraces that also include fine silt and clay overbank flood and estuarine alluvium, and peat bogs (BGS 2014).

## 3.0 PLANNING POLICIES

The geophysical survey was carried out on the recommendation of the county council (SCCAS/CT), following guidance laid down by the *National Planning and Policy Framework* (NPPF, DCLD 2012) which replaced *Planning Policy Statement 5: Planning for the Historic Environment* (PPS5, DCLG 2010) in March 2012. The relevant local development framework is *The Babergh Development Framework Core Strategy (2011-2031)*.

### *3.1 National Planning Policy Framework (NPPF, DCLG March 2012)*

The NPPF recognises that 'heritage assets' are an irreplaceable resource and planning authorities should conserve them in a manner appropriate to their significance when considering development. It requires developers to record and advance understanding of the significance of any heritage assets to be lost (wholly or in part) in a manner proportionate to their importance and the impact, and to make this evidence (and any archive generated) publicly accessible. The key areas for consideration are:

- The significance of the heritage asset and its setting in relation to the proposed development;
- The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance;
- Significance (of the heritage asset) can be harmed or lost through alteration or destruction, or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification;
- Local planning authorities should not permit loss of the whole or part of a heritage asset without taking all reasonable steps to ensure the new development will proceed after the loss has occurred; and
- Non-designated heritage assets of archaeological interest that are demonstrably of equivalent significance to scheduled monuments, should be considered subject to the policies for designated heritage assets.

### *3.2 Babergh Development Framework Core Strategy (2011-2031) Submission Draft*

The local development framework for Babergh states the following:

- Provide support and guidance to ensure that development which may affect historic assets and ensure new development makes a positive contribution to local character and distinctiveness (section 3.3.6).

## 4.0 ARCHAEOLOGICAL BACKGROUND

The following archaeological background is taken from information recorded in the brief (Section 2.1, Brudenell, M). This proposed development is located within an area of archaeological interest that is recorded and held in the County Historic Environment Record (HER) in Suffolk. The grounds of the school are located on higher ground that overlooks the Stour Valley, this area is known to be topographically favourable for early occupation from all archaeological periods. Cropmarks that are believed to be the remains of a Bronze Age ring ditch are recorded on the school playing field (HER no. COG 006) that forms part of a funerary complex of monuments excavated immediately to the west in 2009 (COG 004-005, 028 and 030; SCC Archaeology Service Report 2011/195). Saxon remains were also associated with these barrows.

The large scale of this school development means that there is a high potential for the discovery of previously unknown features and deposits, particularly those of a Prehistoric date.

## 5.0 PROJECT AIMS

A non-intrusive field survey by geophysical prospection is required of the development to determine the extent and significance of subsurface anomalies. A subsequent trial trench evaluation is required to enable the archaeological resource both in quality and extent to be assessed. The main requirements are as follows (Brief, Section 3.2):

- 'Ground-truth' the geophysical results;
- Identify the date, approximate form and purpose of any archaeological deposit, together with its likely extent, localised depth and quality of preservation;
- Evaluate the likely impact of past land uses, and the possible presence of masking colluvial/alluvial deposits;
- Establish the potential for the survival of environmental evidence;
- Establish the suitability of the area for development.

## 6.0 METHODOLOGY

### 6.1 Instrument Type Justification

Britannia Archaeology Ltd employed a Bartington Dual Grad 601-2 fluxgate gradiometer to undertake the survey, because of its high sensitivity and rapid ground coverage. The surveyors noted that that the background magnetic susceptibility was relatively high, which caused a small degree of difficulty when locating a suitable zero station.

### 6.2 Instrument Calibration

One hour was allowed in the morning for the magnetometers sensors to settle before the start of the first grid. The instrument was zeroed after every three grids to minimise the effect of sensor drift. An area with a relatively low magnetic reading was chosen to calibrate the instrument; this same point was used to zero the sensors throughout the survey providing a common zero point. The weather was changeable throughout the day with overcast conditions interspersed with long periods of sunshine causing sensor drift, and the characteristic parallel traverse 'striping' in the raw dataset (Figure 3) that is particularly prevalent in the eastern half of the dataset.

### 6.3 Sampling Interval and Grid Size

The sampling interval was set at 0.25m along 1m traverse intervals, providing 4 readings a metre, the magnetometer survey was undertaken on 20 x 20m grids.

### 6.4 Survey Grid Location

The survey grid was set out to the Ordnance Survey OSGB36 datum to an accuracy of ±0.1m employing a Leica Viva Glonnass Smart Rover GS08 real time kinetic (RTK) survey system. Data were converted to the National Grid Transformation OSTN02 and the instrument was regularly tested using stations with known ETRS89 coordinates. The grids were positioned on an a north-east to south-west alignment (Figure 2).

### 6.5 Data Capture

Instrument readings were recorded on an internal data logger that were downloaded to a laptop at lunchtime and then also at the end of the day. The grid order was recorded on a BA pro-forma to aid in the creation of the data composites. Data were filed in job specific folders. These data composites were checked for quality on site by BA, allowing grids to be re-surveyed if necessary. The data were backed up onto an external storage device in the office and finally a remote server at the end of the day. A five metre exclusion zone was left between the boundaries and the survey area to reduce the amount of field boundary magnetic disturbance, which slightly reduced the area available.

### 6.6 Data Presentation and Processing

Data are presented in both raw and processed data plots in greyscale format (Figures 3 and 4). An XY trace plot of the processed data has also been included (Figure 5).

The raw data is presented with no processing, and was clipped to produce a uniform greyscale plot, processed data schedules are also displayed below.

*Raw Data:*

| | |
|---|---|
| **Data Clipping**: | 2 standard deviations. |
| **Display Clipping**: | +/- 3 standard deviations. |

*Processed Data:*

| | |
|---|---|
| **De-stripe**: | Median Sensors: Grids 5 – 54; |
| **De-stripe:** | Median Traverse: Grids 55 – 57; |
| **Data Clipping**: | -12 to 12nT; |
| **Display Clipping**: | +/- 3 standard deviations. |

An interpretation plan characterising the anomalies recorded can be found at Figure 6, drawing together the evidence collated from both greyscale and XY trace plots (Figures 3, 4 and 5). All figures are tied into the National Grid and printed at an appropriate scale.

### 6.7 Software

Raw data were downloaded using DW Consulting's Archeosurveyor v2.0 and will be stored in this format as raw data. The software used to process the data and produce the composites was also DW Consulting's Archeosurveyor v2.0. Datasets were exported into AutoCAD and placed onto the local survey grid. Interpretation plots were then produced using AutoCAD.

### 6.8 Grid Restoration

Britannia Archaeology Ltd positioned no reference stations within the playing field however the grids can be relocated using the geo-referenced stations presented in Figure 2; these can also enable the accurate targeting of geophysical anomalies.

## 7.0 RESULTS & DISCUSSION

Isolated dipolar ('iron spike') responses were most numerous throughout the dataset and were probably caused by the introduction of modern ferrous cultural debris into the topsoil through loss, rather than resulting from the presence of buried archaeological artefacts. These responses (yellow hatched circles) seem to be fairly evenly spaced throughout the playing field with no apparent concentration.

Eleven areas of magnetic disturbance (yellow hatching) were recorded that vary both in strength and shape. Those present on the sites periphery are caused by the location of a metal fence that bounds both the football pitch immediately to the west and the school grounds to the north. One linear area of magnetic disturbance delineates the Tarmacadam path that bisects the site. A further six smaller areas of magnetic disturbance were also recorded, however no discernible topographic cause can be established from local features or known service locations. Many of them are likely to be of modern origin, however it may be prudent to further investigate a proportion to determine an origin.

A linear area of magnetic disturbance (magenta hatching), that also appears as a topographic feature, demarcates the location of a recently removed all weather cricket wicket. Surrounding it are are ten isolated dipolar anomalies (magenta dots), that form a rectangular boundary, likely to be the ferrous remains of posts employed to fence off the cricket square.

Four very strong isolated dipolar responses (cyan dots) relate to a pair of extant goalposts of an existing football pitch, located in the north-eastern half of the dataset.

One very strong dipolar linear trend (dark blue line) delineates the location of a ferrous and/or electric underground service run, marked as an Un-identified Trace on the topographic plan provided by the client. Caution should be exercised when excavating below ground level in this area.

Three small positive discrete anomalies (orange hatching) located through the centre of the north-eastern half of the dataset are are indicative of archaeological rubbish pits, however a modern or geological derivation cannot be ruled out. Further archaeological investigations would be prudent.

One positive curvilinear anomaly (orange hatching) recorded in the centre of the dataset and close to the northern boundary is indicative of a potential ring ditch, however it is fairly strong (+10nT) and therefore equally could be of modern origin. It would be prudent to further investigate this anomaly.

## 8.0 CONCLUSION

Despite the high potential for recording anomalies of an archaeological potential, only a small degree of those presented within this report are worthy of further archaeological investigation. The site has a relatively high background magnetic susceptibility, potentially caused by a degree of un-substantiated ground levelling or terracing that ground staff (*pers. comm.*) have stated occurred during the 1970's. If this is indeed true there would be a degree of damage to the underlying archaeology and also areas of deeper soil that could potentially mask low magnetic contrast anomalies.

## 9.0 PROJECT ARCHIVE AND DEPOSITION

A full archive will be prepared for all work undertaken in accordance with guidance from the *Selection, Retention and Dispersion of Archaeological Collections,* Archaeological Society for Museum Archaeologists, 1993. Arrangements will be made for the archive to be deposited with the relevant museum/HER Office.

## 10.0 ACKNOWLEDGEMENTS

Britannia Archaeology Ltd would like to thank Mr Mark Hinman of Pre-Construct Archaeology for commissioning the project and his input throughout the project, and to Dr Mr Matthew Brudenell of Suffolk County Council Archaeological Service/Conservation Team for his advice.

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## APPENDIX 1 METADATA SHEETS

### Raw Data

| | |
|---|---|
| Filename | TG Raw.xcp |
| **Description** | |
| Instrument Type | Grad 601-2 (Gradiometer) |
| Units | nT |
| Surveyed by | TPS/MB on 4/17/2014 |
| Assembled by | TPS on 4/17/2014 |
| Direction of 1st Traverse | 45 deg |
| Collection Method | ZigZag |
| Sensors | 2 @ 1.00 m spacing. |
| Dummy Value | 32702.00 |
| **Dimensions** | |
| Composite Size (readings) | 1120 x 120 |
| Survey Size (meters) | 280.00m x 120.00 m |
| Grid Size | 20.00 m x 20.00 m |
| X Interval | 0.25 m |
| Y Interval | 1.00 m |
| **Stats** | |
| Max | 33.81 |
| Min | -32.86 |
| Std Dev | 9.01 |
| Mean | 0.55 |
| Median | 0.87 |
| Composite Area | 3.36 ha |
| Surveyed Area | 1.93 ha |
| **Program** | |
| Name | ArcheoSurveyor |
| Version | 2.5.16.0 |

### Processed Data

| | |
|---|---|
| Filename | TG Processed.xcp |
| **Description** | |
| Instrument Type | Grad 601-2 (Gradiometer) |
| Units | nT |
| Surveyed by | TPS/MB on 4/17/2014 |
| Assembled by | TPS on 4/17/2014 |
| Direction of 1st Traverse | 45 deg |
| Collection Method | ZigZag |
| Sensors | 2 @ 1.00 m spacing. |
| Dummy Value | 32702.00 |
| **Dimensions** | |
| Composite Size (readings) | 1120 x 120 |
| Survey Size (meters) | 280.00m x 120.00 m |
| Grid Size | 20.00 m x 20.00 m |
| X Interval | 0.25 m |
| Y Interval | 1.00 m |
| **Stats** | |
| Max | 12.00 |
| Min | -12.00 |
| Std Dev | 4.17 |
| Mean | -0.07 |
| Median | -0.05 |
| Composite Area | 3.36 ha |
| Surveyed Area | 1.93 ha |
| **Program** | |
| Name | ArcheoSurveyor |
| Version | 2.5.16.0 |

| Source Grids: 57 |
|---|
| 1 Col:0 Row:0 grids\01.xgd |
| 2 Col:0 Row:1 grids\02.xgd |
| 3 Col:0 Row:2 grids\03.xgd |
| 4 Col:0 Row:3 grids\04.xgd |
| 5 Col:1 Row:0 grids\05.xgd |
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| 7 Col:1 Row:2 grids\07.xgd |
| 8 Col:1 Row:3 grids\08.xgd |
| 9 Col:1 Row:4 grids\09.xgd |
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| 12 Col:2 Row:2 grids\12.xgd |
| 13 Col:2 Row:3 grids\13.xgd |
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| 15 Col:3 Row:0 grids\15.xgd |
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| 53 Col:12 Row:1 grids\53.xgd |
| 54 Col:12 Row:2 grids\54.xgd |
| 55 Col:13 Row:0 grids\55.xgd |
| 56 Col:13 Row:1 grids\56.xgd |
| 57 Col:13 Row:2 grids\57.xgd |

## APPENDIX 2 – TECHNICAL DETAILS

### Magnetometer Survey

The magnetometer differs from the 'active' magnetic susceptibility meter by being a 'passive' instrument. Rather than injecting a signal into the ground it detects slight variations in the Earth's magnetic field caused by cultural and natural disturbance (Clark).

Thermoremanent magnetism is produced when a material containing iron oxides is strongly heated. Clay for example has a high iron oxide content that in a natural state is weakly magnetic, when heated these weakly magnetic compounds become highly magnetic oxides that a magnetometer can detect.

The demagnetisation of iron oxides occurs above a temperature known as the Curie point; for example haematite has a Curie point of 675 Celsius and magnetite 565C. At the time of cooling the iron oxides become permanently re-magnetised with their magnetic properties re-aligned in the direction of the Earth's magnetic field (Gaffney and Gater). The direction of the Earth's magnetic field shifts over time and these subtle alignment differences can be recorded. Kilns, hearths, baked clay and ovens can reach Curie point temperatures, and are the strongest responses apart from large iron objects that can be detected. Other cultural anomalies that can be prospected include occupation areas, pits, ditches, furnaces, sunken feature buildings, ridge and furrow field systems and ritual activity (David, 2011). Commonly recorded anomalies include modern ferrous service pipes, field drainage pipes, removed field boundaries, perimeter fences and field boundaries.

### Fluxgate Gradiometers

Fluxgate gradiometers are sensitive instruments that utilise two sensors placed in a vertical plane, spaced 1 metre apart. The sensor above reads the Earth's magnetic (background) response while the sensor below records the local magnetic field. Both sensors are carefully adjusted to read zero before survey commences at a 'zeroing' point, selected for its relatively 'quiet' magnetic background reading. When differences in the magnetic field strength occur between the two sensors a positive or negative reading is logged. Positive anomalies have a positive magnetic value and conversely negative anomalies have a negative magnetic value relative to the site's magnetic background. Examples of positive magnetic anomalies include hearths, kilns, baked clay, areas of burning, ferrous material, ditches, sunken feature buildings, furrows, ferrous service pipes, perimeter fences and field boundaries. Negative magnetic anomalies include earthwork embankments, plastic water pipes and geological features.

The instruments are usually held approximately 0.30m to 0.50m above the ground surface and can detect to a depth of between 1-2metres. Best practice dictates that the optimal direction of traverse in Britain is east to west.

## Magnetic Anomalies

### Linear trends

Linear trends can be both positive and negative magnetic responses. If they are broad, relatively weak or negative in nature they may be of agricultural or geological origin, for example periglacial channels, land drains or ploughing furrows. If the responses are strong positive trends they are more likely to be of archaeological origin. Archaeological settlement ditches tend to be rich in highly magnetic iron oxides that accumulate in them via anthropogenic activity and humic backfills. Conversely surviving banks will be negative in nature, the material is derived from subsoil deposits that is less likely to be positively magnetic. Curvilinear trends can also be recorded and are indicative of archaeological structures such as drip-gullies.

### Discrete anomalies

Discrete anomalies appear as increased positive responses present within a localised area. They are caused by a general increase in the amount of magnetic iron oxides present within the humic back-fill of for example a rubbish pit.

### 'Iron spike' anomalies

These strong isolated dipolar responses are usually caused by ferrous material present in the topsoil horizon. They can have an archaeological origin but are usually introduced into the topsoil during manuring.

### Areas of magnetic disturbance

An area of magnetic disturbance is usually associated with material that has been fired. For example areas of burning, demolition (brick) rubble or slag waste spreads. They can also be caused by ferrous material, e.g. close proximity to barbwire or metal fences and field boundaries, buried services, pylons and modern rubbish deposits.

## APPENDIX 3 – OASIS FORM

### OASIS ID: britanni1-177137

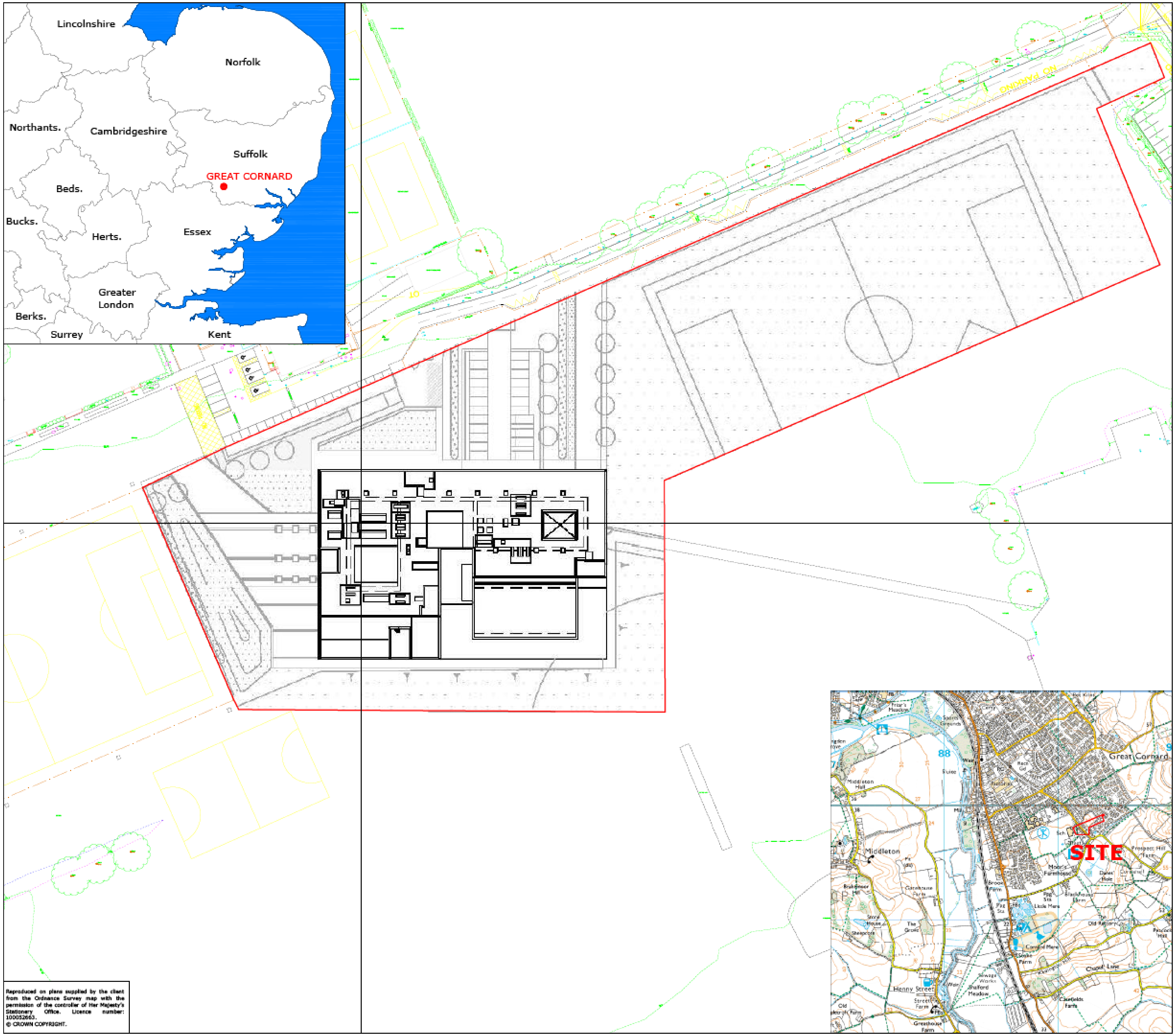
| | |
|---|---|
| **Project details** | |
| Project name | Thomas Gainsborough School, Head Lane, Great Cornard, Suffolk, Detailed Geophysical Survey |
| Short description of the project | Detailed fluxgate gradiometer survey was undertaken by Britannia Archaeology Ltd over one playing field in April 2014. Despite the sites high potential for encountering remains of a prehistoric origin, only a relatively narrow range of anomalies were recorded, of which only a few have a potential archaeological derivation. A degree of site levelling and terracing is believed to have been undertaken in the 1970's that may have damaged and could also be masking anomalies of potential archaeological origin. |
| Project dates | **Start:** 17-04-2014 **End:** 17-04-2014 |
| Previous/future work | Not known / Yes |
| Any associated project reference codes | P1057 - Contracting Unit No.<br>R1054 - Contracting Unit No. |
| Type of project | Field evaluation |
| Site status | None |
| Current Land use | Community Service 1 - Community Buildings |
| Monument type | NONE None |
| Significant Finds | NONE None |
| Methods & techniques | "Geophysical Survey" |
| Development type | Public building (e.g. school, church, hospital, medical centre, law courts etc.) |
| Prompt | Planning condition |
| Position in the planning process | After full determination (eg. As a condition) |
| Solid geology | CHALK (INCLUDING RED CHALK) |
| Drift geology | RIVER TERRACE DEPOSITS |
| Techniques | Magnetometry |
| **Project location** | |
| Country | England |
| Site location | SUFFOLK BABERGH GREAT CORNARD Thomas Gainsborough School, Head Lane, Great Cornard, Suffolk |
| Study area | 2.40 Hectares |
| Site coordinates | TL 889 398 52.0239109104 0.753611148954 52 01 26 N 000 45 13 E Point |
| Height OD /Depth | **Min:** 25.00m **Max:** 25.00m |
| **Project creators** | |
| Name of Organisation | Britannia Archaeology Ltd |
| Project brief originator | Local Authority Archaeologist and/or Planning Authority/advisory body |
| Project design originator | Timothy Schofield |
| Project director/manager | Timothy Schofield |
| Project supervisor | Timothy Schofield |
| Type of sponsor/funding body | Developer |
| Name of sponsor/funding body | Kier Group PLC |

**Project archives**

| | |
|---|---|
| Physical Archive Exists? | No |
| Digital Archive recipient | Suffolk HER |
| Digital Contents | "Survey" |
| Digital Media available | "Geophysics", "Images raster / digital photography", "Images vector", "Survey", "Text" |
| Paper Archive recipient | Suffolk HER |
| Paper Contents | "Survey" |
| Paper Media available | "Report", "Survey ", "Unpublished Text" |

**Project bibliography 1**

| | |
|---|---|
| Publication type | Grey literature (unpublished document/manuscript) |
| Title | Thomas Gainsborough School, Head Lane, Great Cornard, Suffolk; Detailed Magnetometer Survey |
| Author(s)/Editor(s) | Schofield, T.P |
| Other bibliographic details | R1054 |
| Date | 2014 |
| Issuer or publisher | Britannia Archaeology Ltd |
| Place of issue or publication | Stowmarket |
| Description | A4 bound report with A3 fold-out figures. |
| URL | www.britannia-archaeology.com |
| Entered by | Tim Schofield (tim@britannia-archaeology.com) |
| Entered on | 25 April 2014 |






N

| | |
|---|---|
| Proposed Construction | |
| Site Boundary | |

| NGR: | REPORT NUMBER: |
|---|---|
| TL 889 398 | 1054 |

PROJECT:
THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT:
PCA

DESCRIPTION:
SITE & PROPOSED CONSTRUCTION LOCATION PLAN

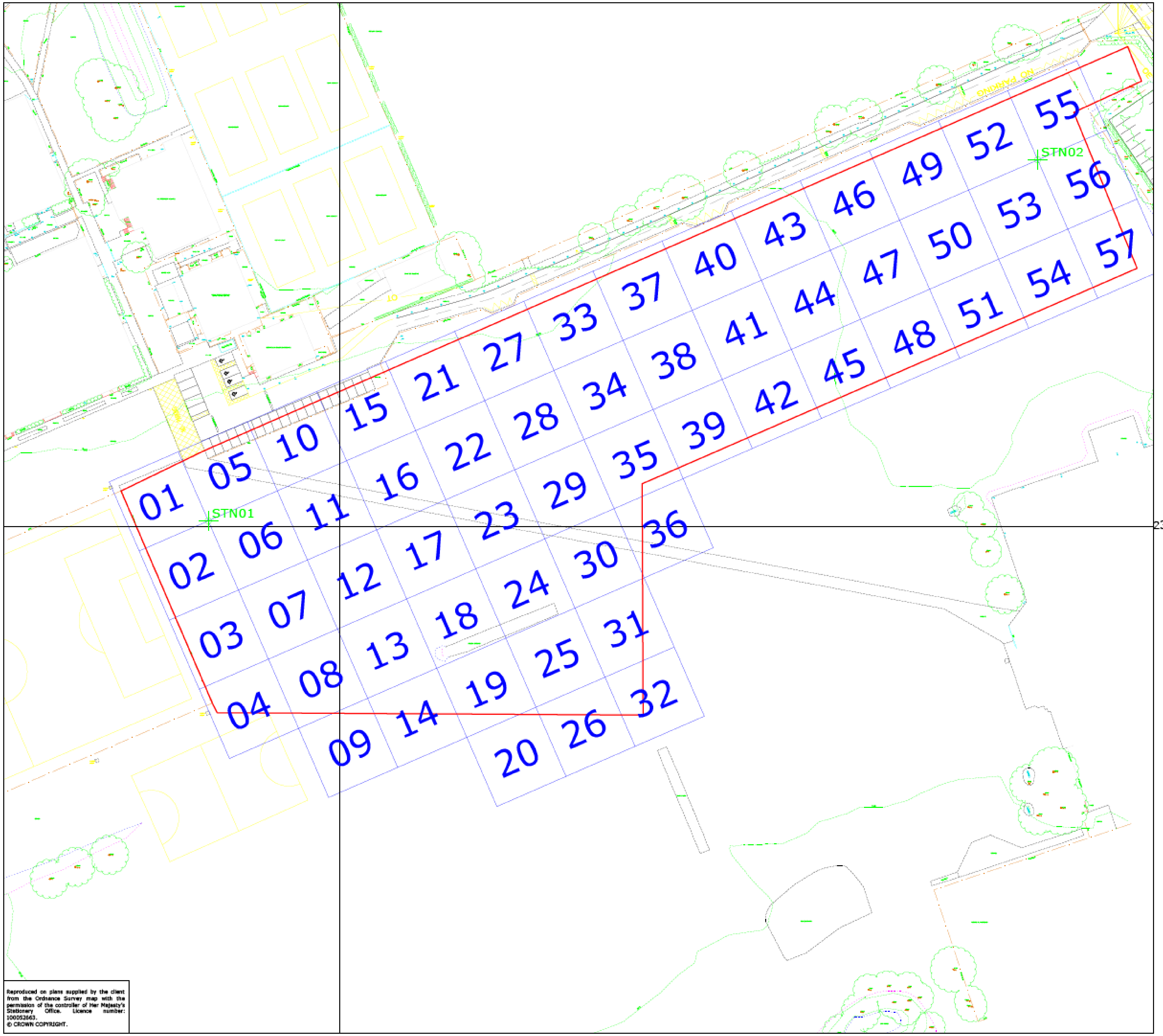
BRITANNIA ARCHAEOLOGY LTD

115 OSPREY DRIVE, STOWMARKET, SUFFOLK
IP14 5UX

T: 01449 763034
E: info@britannia-archaeology.com
W: www.britannia-archaeology.com

SCALE: 1:1000 0 50m

| PLOT: | APPROVED: | VERSION: |
|---|---|---|
| A3 | MCA | 01 |
| DATE: | AUTHOR: | FIGURE: |
| APR 2014 | TPS | 01 |






N

| STATION | EASTING | NORTHING |
|---|---|---|
| 01 | 588865.122 | 239801.422 |
| 02 | 589085.203 | 239897.151 |

Survey Grid

Site Boundary

NGR: TL 889 398

REPORT NUMBER: 1054

PROJECT: THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT: PCA

DESCRIPTION: SURVEY GRID & REFERENCING INFORMATION PLAN


BRITANNIA ARCHAEOLOGY LTD

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SCALE: 1:1000 (0 – 50m)

| PLOT: A3 | APPROVED: MCA | VERSION: 01 |
|---|---|---|
| DATE: APR 2014 | AUTHOR: TPS | FIGURE: 02 |




N

+33.81nT

-32.86nT

Site Boundary

| NGR: | REPORT NUMBER: |
|---|---|
| TL 889 398 | 1054 |

PROJECT:
THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT:
PCA

DESCRIPTION:
RAW MAGNETOMETER GREYSCALE PLAN

BRITANNIA ARCHAEOLOGY LTD
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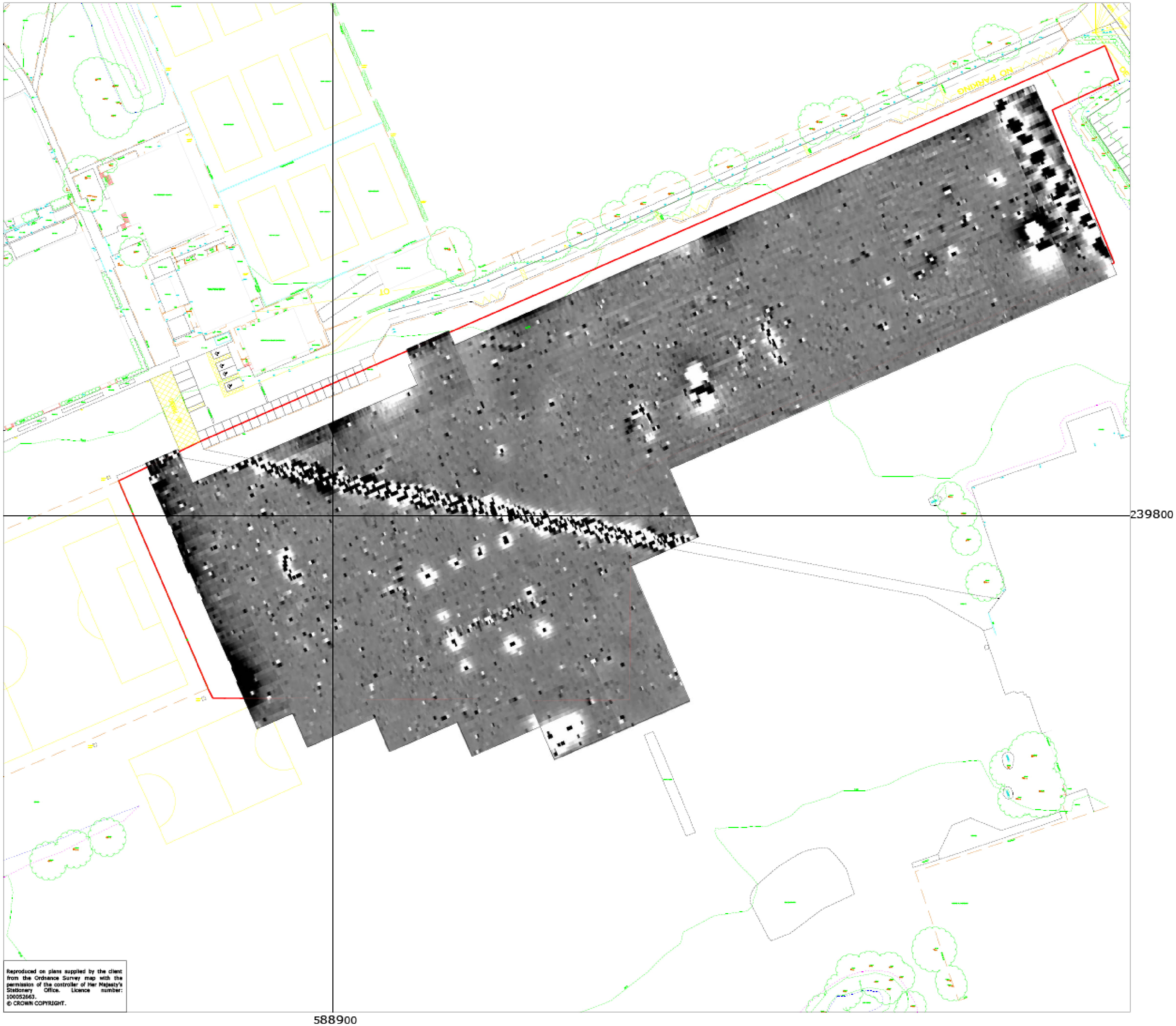
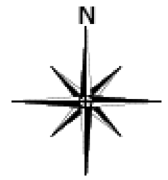
W: www.britannia-archaeology.com

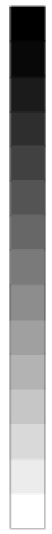
SCALE: 1:1000 0 50m

| PLOT: | APPROVED: | VERSION: |
|---|---|---|
| A3 | MCA | 01 |
| DATE: | AUTHOR: | FIGURE: |
| APR 2014 | TPS | 03 |






Site Boundary

| | |
|---|---|
| NGR: TL 889 398 | REPORT NUMBER: 1054 |

PROJECT:
THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT:
PCA

DESCRIPTION:
PROCESSED MAGNETOMETER GREYSCALE PLAN

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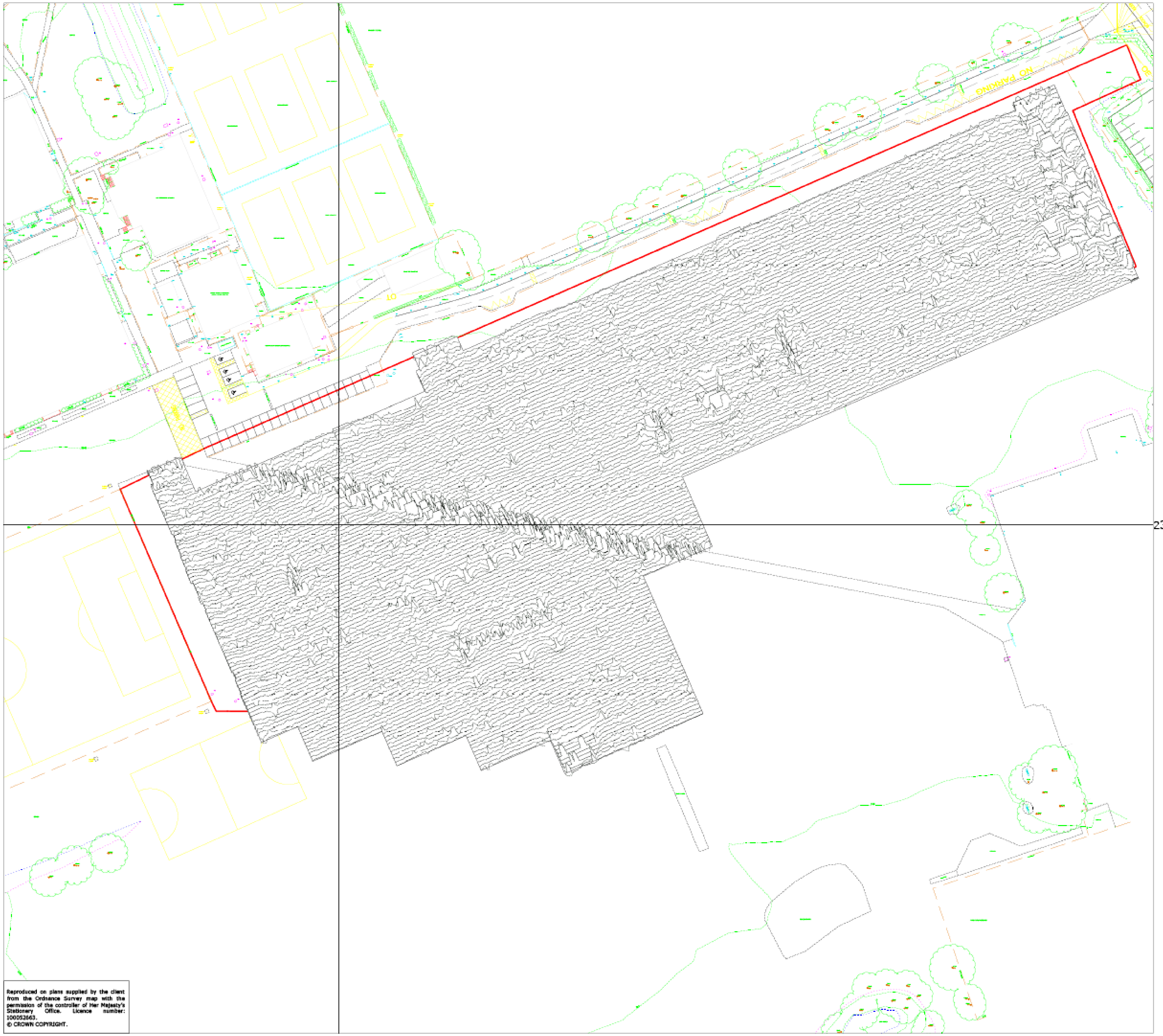
SCALE: 1:1000 (0 – 50m)

| PLOT: | APPROVED: | VERSION: |
|---|---|---|
| A3 | MCA | 01 |
| DATE: | AUTHOR: | FIGURE: |
| APR 2014 | TPS | 04 |






N

| 40nT/cm | Scale Interval |
|---|---|
| | Site Boundary |

NGR: TL 889 398

REPORT NUMBER: 1054

PROJECT:
THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT: PCA

DESCRIPTION:
PROCESSED MAGNETOMETER XY TRACE PLOT

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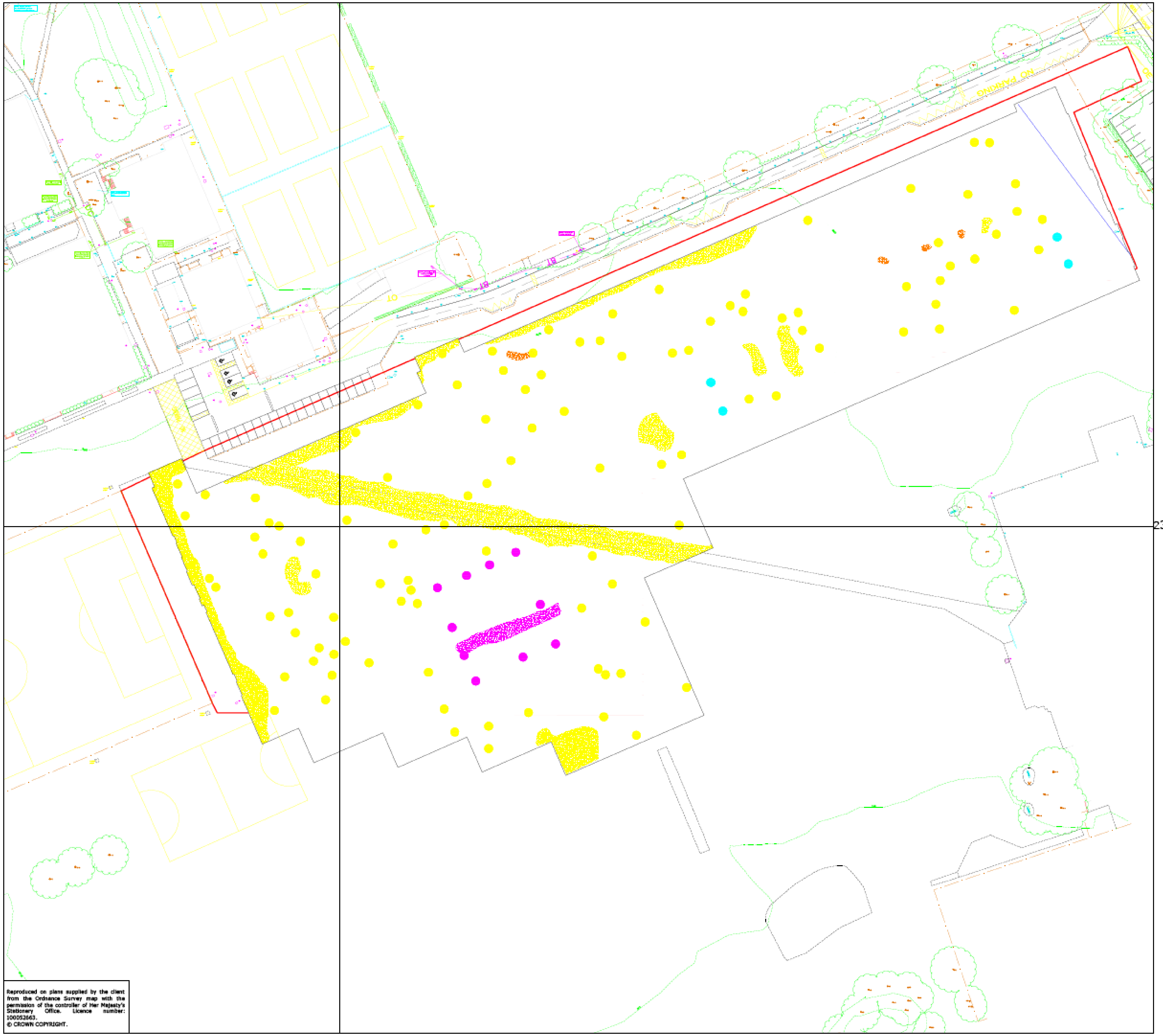
SCALE: 1:1000 (0 – 50m)

| PLOT: | APPROVED: | VERSION: |
|---|---|---|
| A3 | MCA | 01 |
| DATE: | AUTHOR: | FIGURE: |
| APR 2014 | TPS | 05 |





N

| | |
|---|---|
| | Positive Discrete Anomaly, Archaeology? |
| | Positive Curvilinear Anomaly, Archaeology? |
| | Strong Dipolar Linear Trend, Ferrous/Electric Service Run |
| | Extant Goalposts |
| | Cricket Wicket & Square |
| | Area of Magnetic Disturbance |
| | Isolated Dipolar Response |
| | Site Boundary |

NGR: TL 889 398

REPORT NUMBER: 1054

PROJECT: THOMAS GAINSBOROUGH SCHOOL, HEAD LANE, GREAT CORNARD, SUFFOLK

CLIENT: PCA

DESCRIPTION: INTERPRETATION PLOT OF MAGNETOMETER ANOMALIES

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SCALE: 1:1000 0 50m

| PLOT: | APPROVED: | VERSION: |
|---|---|---|
| A3 | MCA | 01 |
| DATE: | AUTHOR: | FIGURE: |
| APR 2014 | TPS | 06 |